Chapter 9
Accumulation Time and
Small Quantity Generator Requirements

Contents

9.1 Introduction

9.1.1 Background

HW generators have been given the authority to accumulate HW on-site for specified periods of time without a permit or interim status, as long as the requirements of 40 CFR 262.34 (Accumulation Time) and 40 CFR 265.201 (Small Quantity Generators) are met. If a generator accumulates HW in any quantity for 90 days or less and/or generates between 100 and 1,000 kilograms of HW a month, and stores it for 180 days or less (or 270 days if the generator must ship the waste a distance greater than 200 miles and does not accumulate over 6,000 kilograms on-site at any time), a permit is not required.

9.1.2 Major Requirements

- **Module A: Accumulation Time Requirements.** This module describes the time requirements for accumulating HW on-site in tanks without a permit.
- **Module B: Small Quantity Generator Requirements.** Owners and operators who qualify as small quantity generators may store their HW on-site without a permit under the terms described in this module.

9.2 Module A: Accumulation Time Requirements

9.2.1 Introduction

Generators of HW may accumulate HW on-site for 90 days or less **in any quantity** without a permit or interim status as long as the waste-handling requirements of 40 CFR Part 265, Subpart J except for 265.197(c) and 265.200 and certain tank marking requirements are met. In developing these regulations, EPA recognized that generators often need time to accumulate HWs for economical shipment off-site, and for efficient management on-site.

DOE personnel should consult this chapter when contemplating the establishment of any new "satellite" accumulation areas, including HW tanks.

9.2.2 Milestones

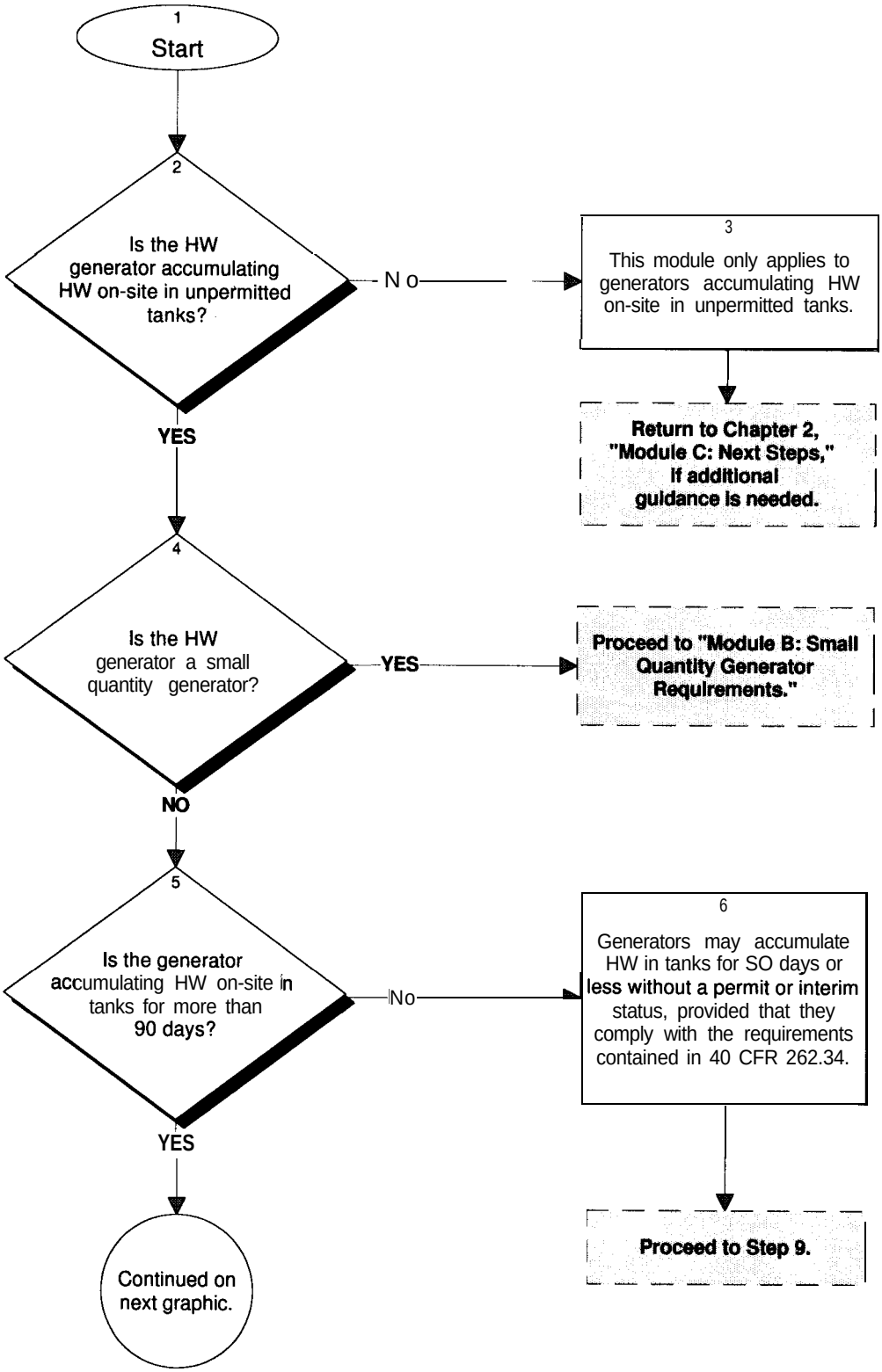
Is the HW generator accumulating HW on-site in compliance with 40 CFR 262.34?

The HW generator is in compliance if:

- HW is not accumulated on-site for more than 90 days without the approval of the Regional Administrator;
- The date upon which the accumulation period began and the words "Hazardous Waste" are clearly marked on the tank; and
- The generator complies with the requirements of 40 CFR Part 265 Subpart J, except 40 CFR 265.197(c) (Closure and Post-closure Care)

The following module describes the requirements that must be met when accumulating HW on-site in tanks at a facility without a permit or interim status.

Figure 9.1: Accumulation Time Requirements



Step 1 Start

Step 2 EPA allows hazardous waste generators to accumulate hazardous waste on-site in tanks without a permit or interim status for the purpose of accumulating enough HW to make it economical for the generator to send the HW off-site for treatment or disposal.

Step 3 If the HW generator is not accumulating HW on-site in tanks, these regulations do not apply.

Step 4 Small quantity generators (SQGs) are those who generate greater than 100 but less than 1,000 kilograms HW on-site. The requirements for SQGs are covered in Module B.

Step 5 The generator may accumulate HW on-site for 90 days or less without a permit or without having interim status, provided that the generator complies with certain requirements.

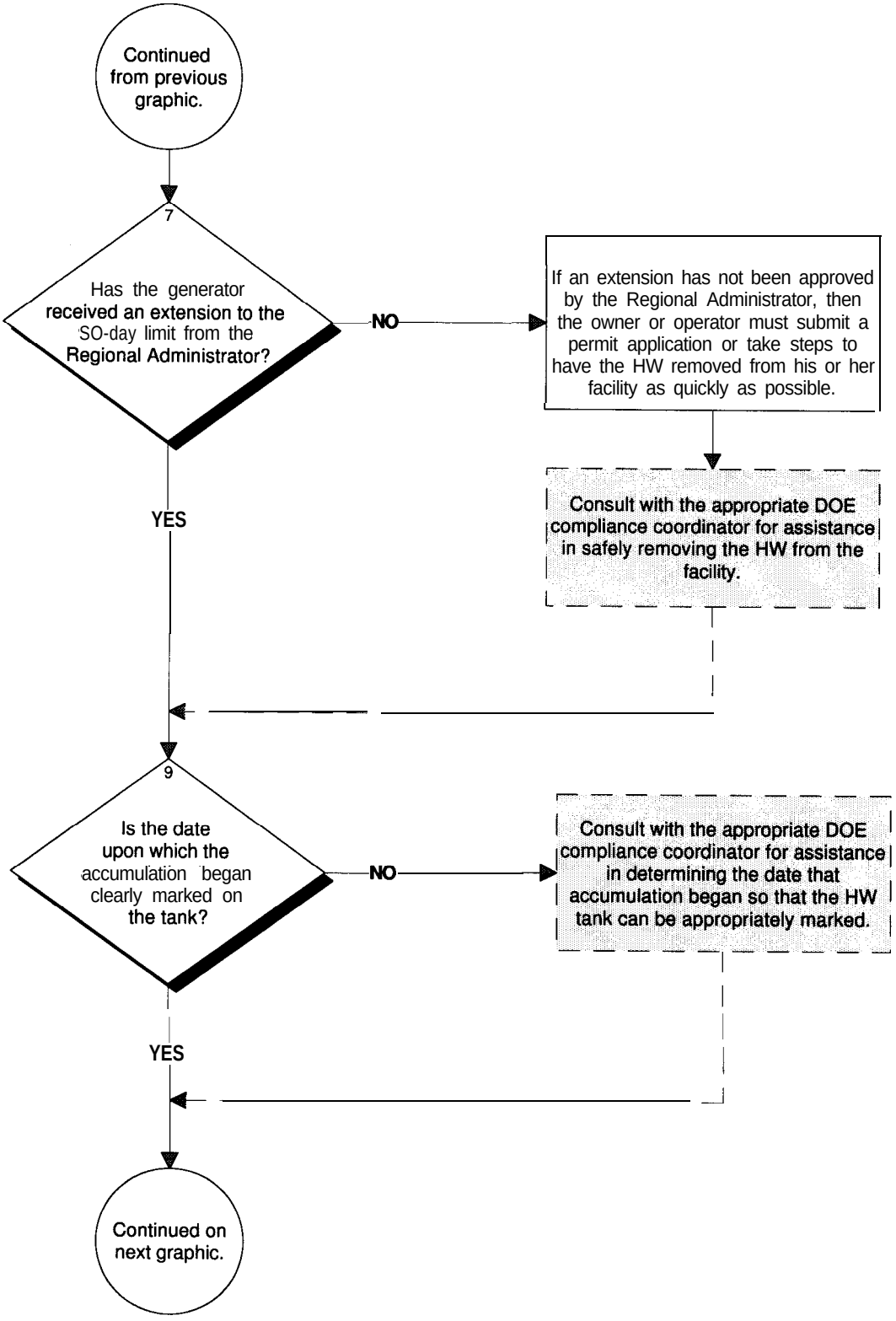
Step 6 According to 40 CFR 262.34, the generator must comply with Subpart J of 40 CFR Part 265 (Tank Systems), **except**:

- 40 CFR 265.197(c) (Closure and post-closure care requirements for HW tank systems without secondary containment) - (see Chapter 10, Module B, for these requirements); and
- 40 CFR 265.200 (Waste Analysis and Trial Tests).

In addition, such a generator is **exempt** from all requirements in Subparts G (Closure and post-closure plan) and H (Financial Requirements) of 40 CFR Part 265, **except** for:

- 40 CFR 265.111 (Closure Performance Standard); and
- 40 CFR 265.114 (Disposal and Decontamination of Equipment, Structures, and Soils).

The generator **must** comply with the requirements for owners or operators in Subparts C (Preparedness and Prevention) and D (Contingency Plan and Emergency Procedures) in 40 CFR Part 265, and with 40 CFR 265.16 (Personnel Training).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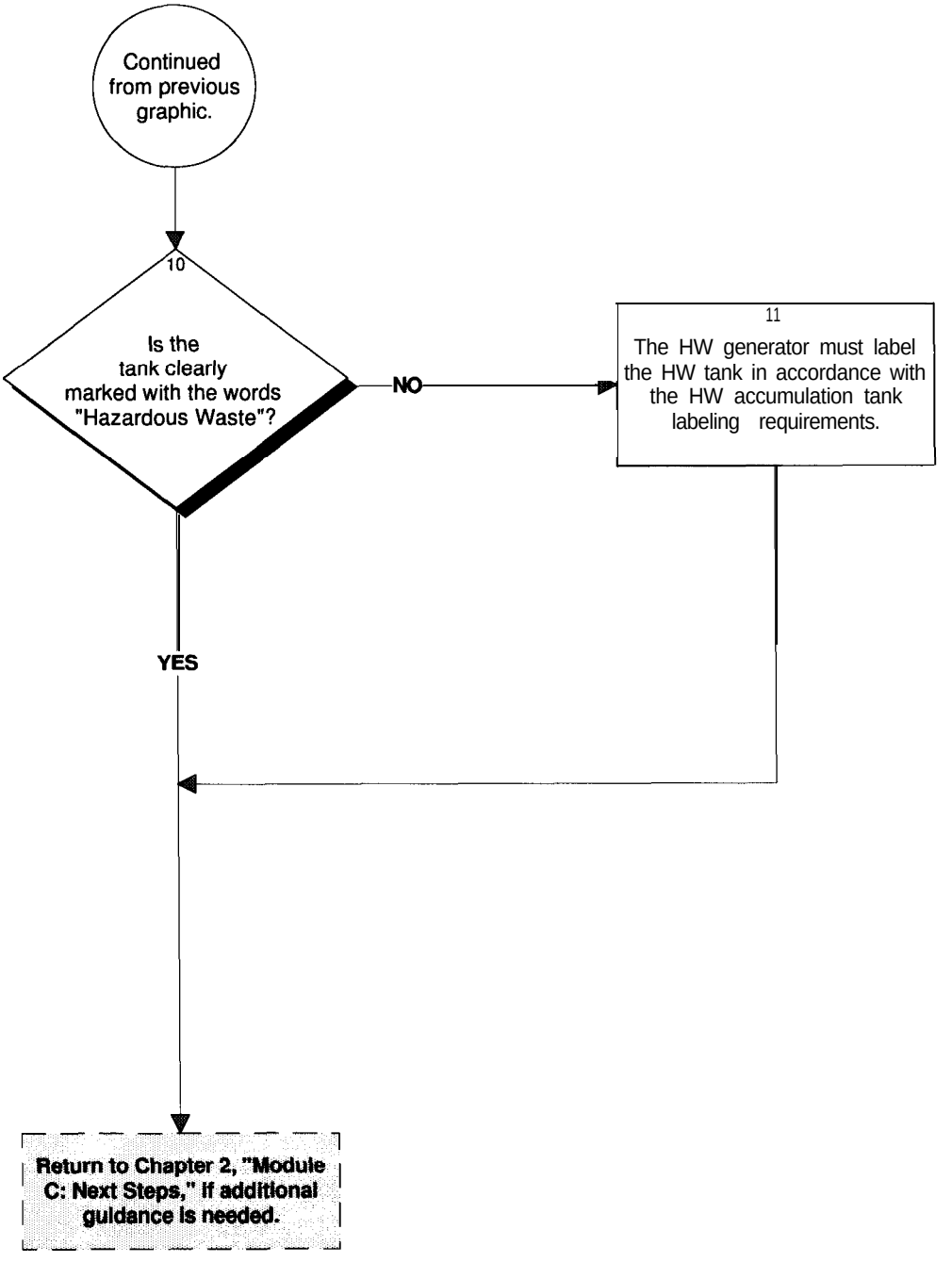
7
Has the generator received an extension to the SO-day limit from the Regional Administrator?
NO
If an extension has not been approved by the Regional Administrator, then the owner or operator must submit a permit application or take steps to have the HW removed from his or her facility as quickly as possible.
Consult with the appropriate DOE compliance coordinator for assistance in safely removing the HW from the facility.
YES
9
Is the date upon which the accumulation began clearly marked on the tank?
NO
Consult with the appropriate DOE compliance coordinator for assistance in determining the date that accumulation began so that the HW tank can be appropriately marked.
YES
Continued on next graphic.

Step 7 A generator who accumulates HW for more than 90 days is an operator of a storage facility and is subject to the requirements of 40 CFR Parts 264 and 265 and the permit requirements of 40 CFR Part 270 **unless** he/she has been granted an extension to the 90-day period.

Step 8 An extension of up to 30 days may be granted at the discretion of the Regional Administrator on a case-by-case basis. Such an extension may be granted by EPA if HW must remain on-site for longer than 90 days due to unforeseen, temporary, and uncontrollable circumstances. If the extension is not granted, the waste must be removed or the facility must submit a permit application.

Step 9 The date that accumulation began must be clearly marked so that compliance personnel can manage the tanks according to EPA's deadlines.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10
Is the tank clearly marked with the words "Hazardous Waste"?
NO
11
The HW generator must label the HW tank in accordance with the HW accumulation tank labeling requirements.
YES
Return to Chapter 2, "Module C: Next Steps," if additional guidance is needed.

Step 10 Although 40 CFR 262.34 only requires the words "Hazardous Waste" on a HW tank label, it is prudent for the generator to label the tank with the actual contents of the tank (e.g., EPA waste codes).

Step 11 The "Hazardous Waste" label and the accumulation date are the minimum information that must be affixed to the tank as required by 40 CFR 262.34(a)(2) and (3).

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9.3 Module B: Small Quantity Generator Requirements

9.3.1 Introduction

Small quantity generators (SQGs) are those generators that produce **more** than 100 kilograms but **less** than 1,000 kilograms a month of HW. SQGs may store HW without a permit or interim status for longer than 90 days as long as they comply with 40 CFR 262.34(d), (e), and/or (f) (Accumulation Time) plus the additional requirements found in 40 CFR 265.201 (Special Requirements for Generators of Between 100 and 1,000 kg/Mo that Accumulate HW in Tanks) and Subpart C of 40 CFR Part 264/265.

A SQG may be **conditionally exempt** from full SQG regulation if he or she generates **less** than 100 kilograms of HW in a month; less than 1 kilogram of **acutely** HW listed in 40 CFR 261.31, 261.32,* or 261.33(e); or less than 100 kilograms per month of any (1) residue or (2) contaminated soil, waste, or other debris resulting from a spill into or on any land or water body of an acutely HW listed in 40 CFR 261.31, 261.32, or 261.33(e).

A conditionally exempt SQG's HW are not subject to regulation under 40 CFR Parts 262 through 266, 268, 270, and 124 and the notification requirement of Section 3010 of RCRA. However they must comply with 40 CFR 262.11 (HW Determination).

Hazardous wastes generated by conditionally exempt SQGs may be mixed with non-HW and remain conditionally exempt even though the resultant mixture exceeds the quantity limitations, unless the mixture exhibits any of the characteristics of HW identified in Subpart C of 40 CFR Part 261.

If a conditionally exempt SQG's wastes are mixed with used oil, the mixture is subject to Subpart E of 40 CFR Part 266 if it is destined to be burned for energy recovery. Any material produced from such a mixture by processing, blending, or other treatment is also so regulated if it is destined to be burned for energy recovery. [40 CFR 261.5]

* No acutely HWs are currently listed in 40 CFR 261.32; however, EPA may add new acutely HWs to this list in the future.

9.3.2 Milestones

Is the generator a small quantity generator?

Small quantity generators are those who:

- Accumulate more than 100 but less than 1,000 kilograms of HW in a calendar month;
- Store the HW on-site for less than 180 days (or 270 days if the generator must ship the HW greater than 200 miles); and
- Accumulate less than 6,000 kilograms of HW at any time.

Is the small quantity generator conditionally exempt?

Conditionally exempt small quantity generators are those who generate less than:

- 100 kilograms per month of hazardous waste;
- 1 kilogram per month of acutely hazardous waste; or
- 100 kilograms per month of any residue, soil, or debris resulting from the cleanup of a spill and contaminated with an acutely hazardous waste.

The following module provides the requirements for SQGs who are storing HW in tanks prior to transporting them off-site for storage or disposal.

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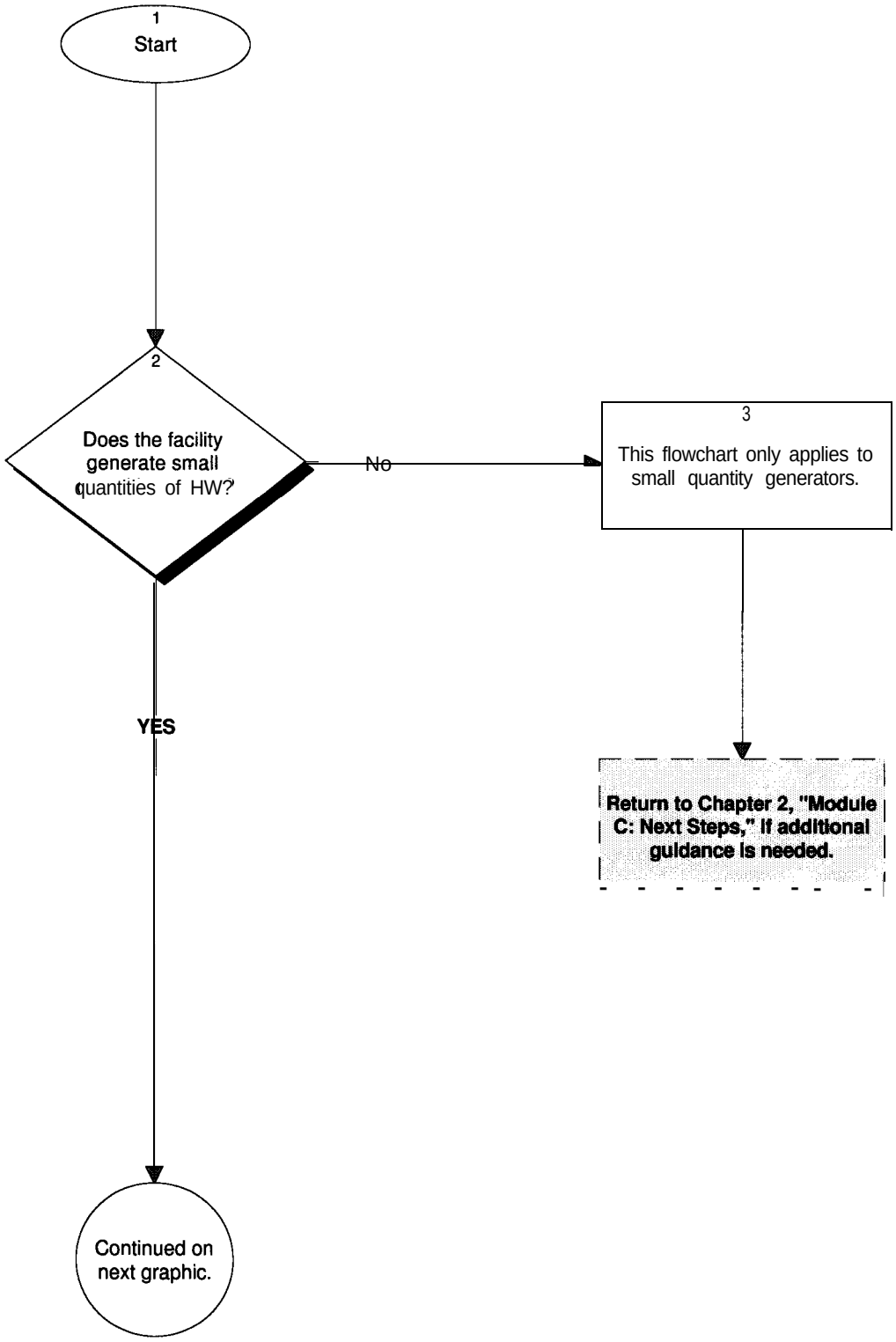
Figure 9.2 Small Quantity Generator Requirements

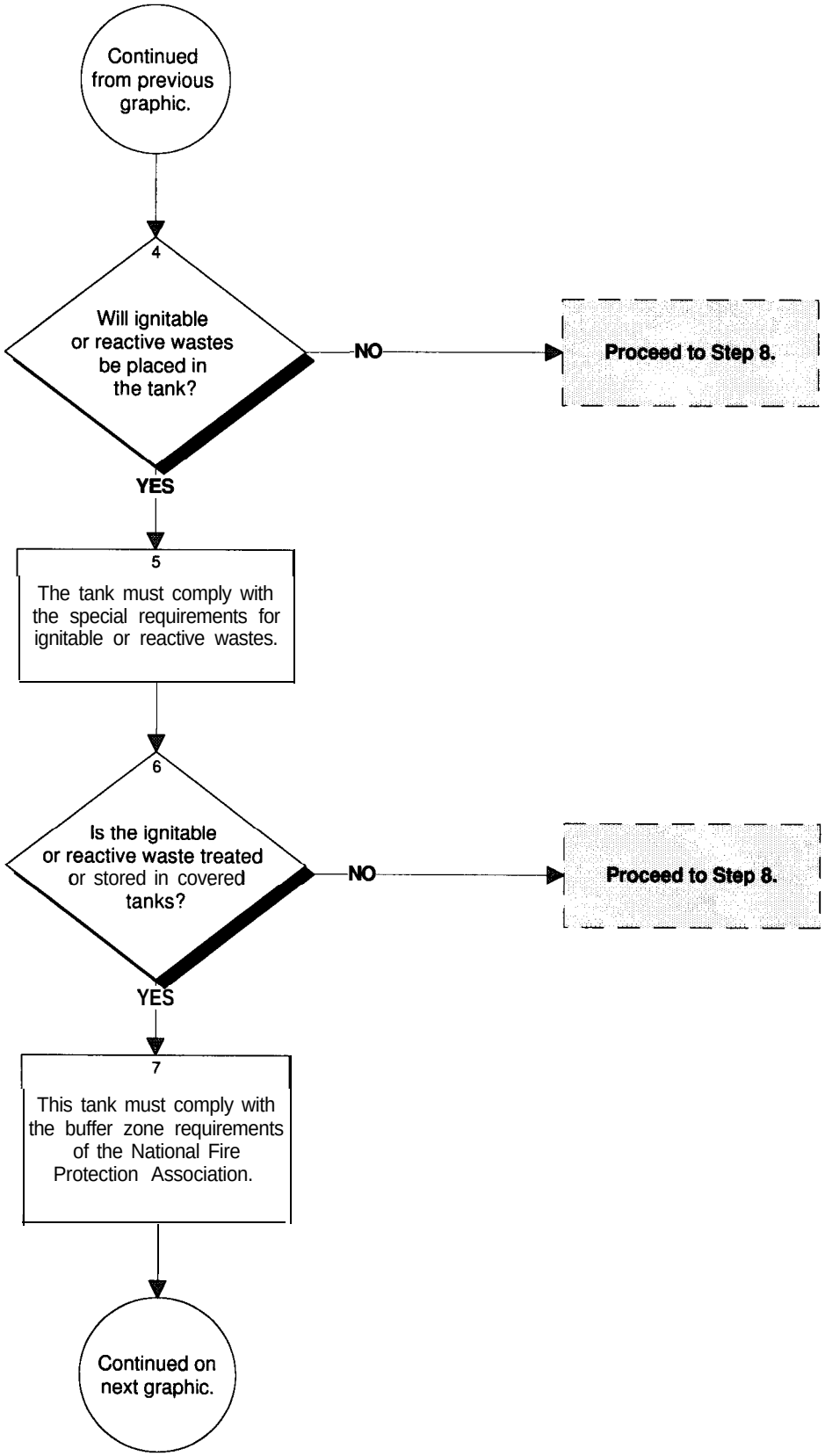


Step 1 Start

Step 2 The requirements of this section apply to small quantity generators (SQGs) who:

- Accumulate between 100 kilograms and 1,000 kilograms of HW in a calendar month;
- Accumulate HW in tanks for less than 180 days (or 270 days if the generator must ship the HW greater than 200 miles); and
- Do not accumulate over 6,000 kilograms of HW on-site at any time.

Step 3 EPA treats SQGs differently than other HW generators. This flow chart outlines the requirements for small quantity generators.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4
Will ignitable or reactive wastes be placed in the tank?
NO
Proceed to Step 8.
YES
5
The tank must comply with the special requirements for ignitable or reactive wastes.
6
Is the ignitable or reactive waste treated or stored in covered tanks?
NO
Proceed to Step 8.
YES
7
This tank must comply with the buffer zone requirements of the National Fire Protection Association.
Continued on next graphic.

Step 4 Ignitable or reactive HW must not be placed in a tank unless:

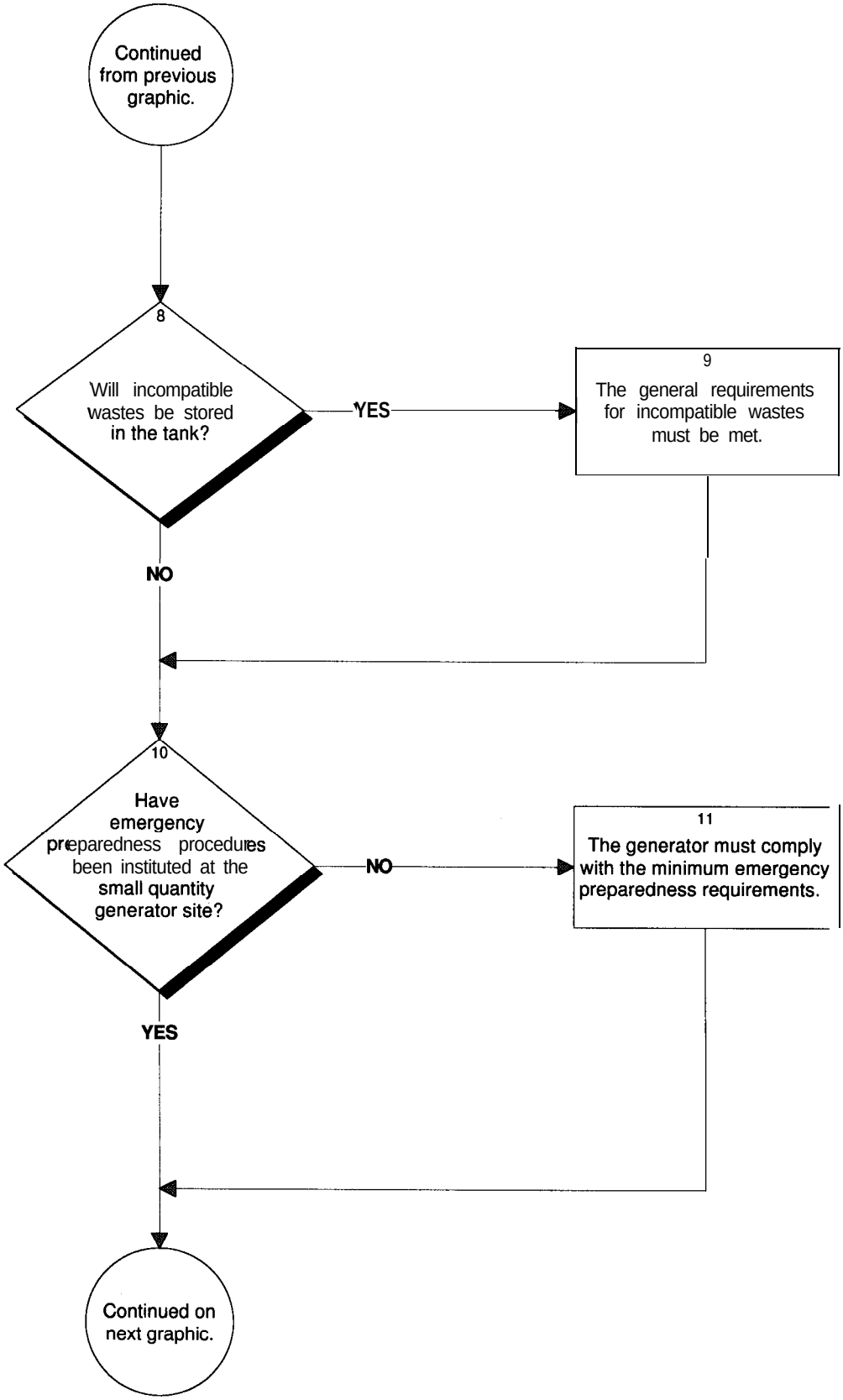
- The HW is treated, rendered, or mixed before or immediately after placement in a tank so that:
  - The resulting HW, mixture, or dissolved material no longer meets the definition of ignitable or reactive HW; and
  - The general requirements for ignitable, reactive, or incompatible hazardous wastes (Step 5) are met; or
- The HW is stored or treated in a manner that protects it from any material or condition that may cause the waste to ignite or react; or
- The tank is used solely for emergencies.

Step 5 EPA requires that SQGs comply with 40 CFR 265.17(b), which states that treatment, storage, or disposal of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials, must be conducted so that it does not:

- Generate extreme heat or pressure, fire or explosion, or violent reaction;
- Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;
- Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;
- Damage the structural integrity of the device or facility containing the waste; or
- Threaten human health or the environment.

Step 6 Covered tanks that hold ignitable or reactive HW must meet special EPA requirements, specified in Step 7.

Step 7 The owner or operator of a facility that treats or stores ignitable or reactive waste in covered tanks must comply with the buffer zone requirements for tanks contained in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," (1977 or 1981). [9]


Continued from previous graphic.
8
Will incompatible wastes be stored in the tank?
YES
9
The general requirements for incompatible wastes must be met.
NO
10
Have emergency preparedness procedures been instituted at the small quantity generator site?
NO
11
The generator must comply with the minimum emergency preparedness requirements.
YES
Continued on next graphic.

Step 8 If the HW to be stored in this tank is incompatible with the material previously stored in the tank, or is incompatible with the tank itself, special EPA requirements must be met.

Step 9 Incompatible wastes, or incompatible wastes and materials (see 40 CFR Part 265, Appendix V for examples) must not be placed in the same tank, unless the requirements for ignitable, reactive, or incompatible wastes (Step 5) are met. Also, HW must not be placed in an unwashed tank that previously held an incompatible HW or material unless the general requirements for ignitable, reactive, or incompatible HWs (Step 5) are met.

Step 10 At all times there must be at least one employee, designated as the emergency response coordinator, either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) who is responsible for coordinating all emergency response measures specified in this section. In addition, the generator must post the following information next to the appropriate telephone(s):

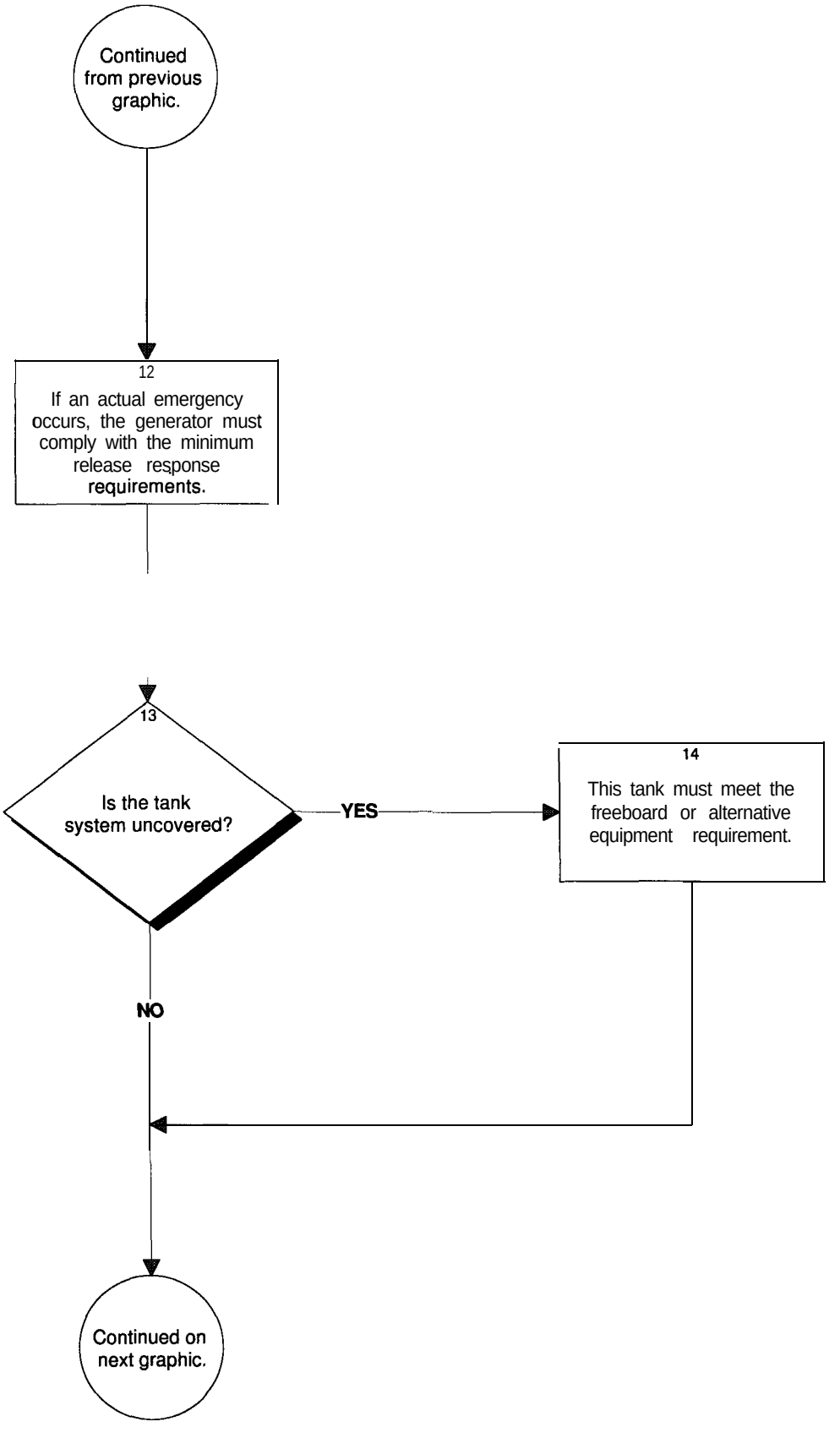
- The name and telephone number of the emergency coordinator; and
- The location of fire extinguishers and spill control material and, if present, fire alarms; and the telephone number of the responding fire department, unless the facility has a direct alarm.

The generator must ensure that all employees are thoroughly familiar with proper HW handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies. The emergency coordinator (or a designee) must respond to any emergencies that arise. The applicable responses are as follows:

- In the event of a fire, call the fire department or attempt to extinguish it using the appropriate response equipment;
- In the event of a spill, contain the flow of HW to the extent possible, and, as soon as is practicable, clean up the HW and any contaminated materials or soil;
- In the event of a fire, explosion, or other release that could threaten human health outside the facility, or when the generator has knowledge that a spill has reached surface water, he/she must immediately notify the National Response Center (using their 24-hour toll free number 800/424-8802) of the following:
  - Name, address, and U.S. EPA Identification Number of the generator;
  - Date, time, and type of incident (e.g., spill or fire);
  - Quantity and type of HW involved in the incident;
  - Extent of injuries, if any; and
  - Estimated quantity and disposition of recovered materials, if any.

  (See listing of DOE Orders under Chapter 8, 8.3.1, "Module B: Introduction" and the guidance documents listed in "Module B, Step 2").

Step 11 While these are the minimum emergency preparedness requirements, the facility may need to comply with additional site-specific requirements.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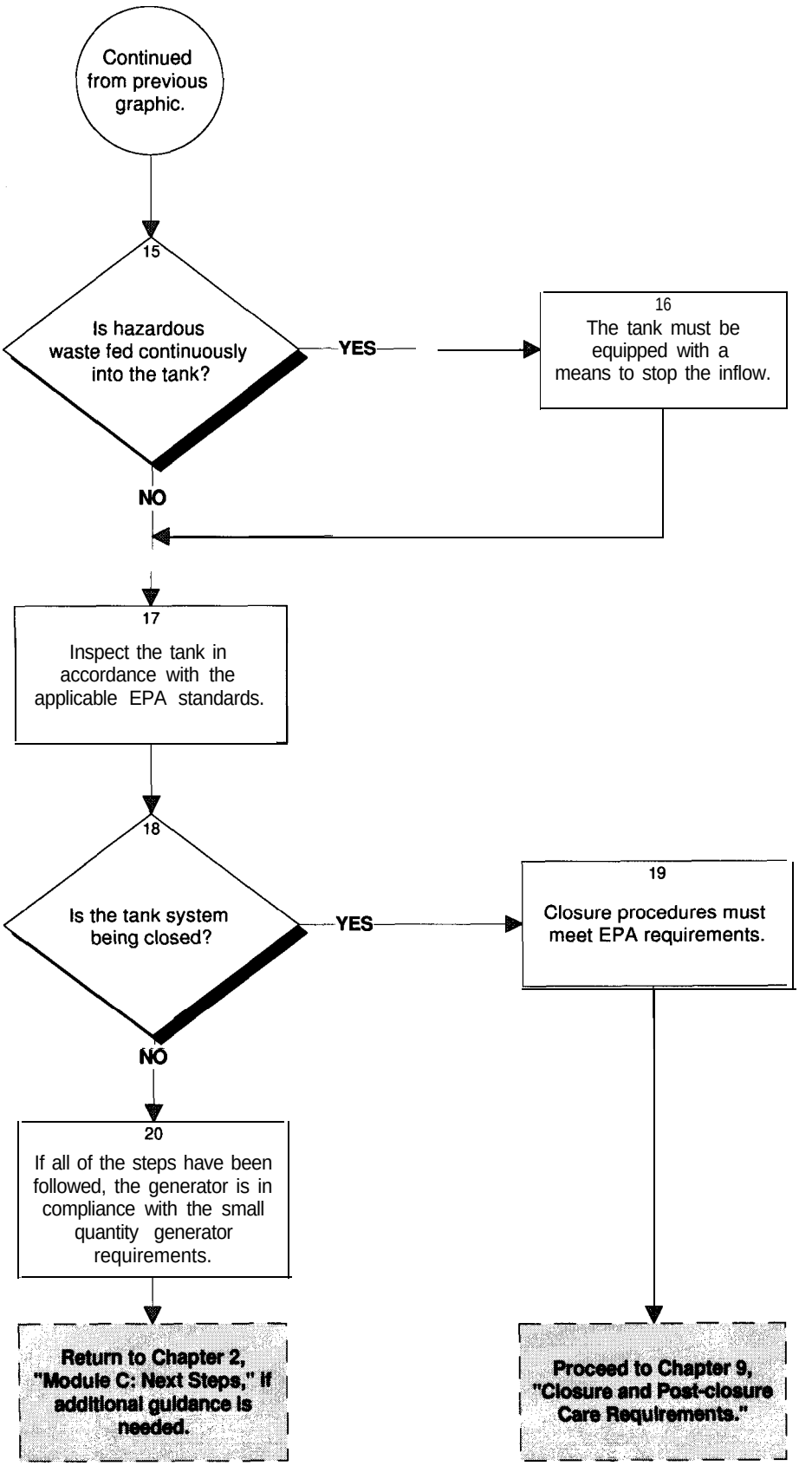
12
If an actual emergency occurs, the generator must comply with the minimum release response requirements.
13
Is the tank system uncovered?
YES
14
This tank must meet the freeboard or alternative equipment requirement.
NO
Continued on next graphic.

Step 12 In addition to meeting the emergency preparedness procedures of 40 CFR 262.34 found in Step 10, the requirements of 40 CFR 264/265.196 (Release Response Requirements) must be met. Refer to Chapter 8.

Step 13 Uncovered tanks must meet special EPA requirements specified in Step 14.

Step 14 Uncovered tanks must be operated to ensure at least 60 centimeters (2 feet) of freeboard. However, if the tank is equipped with a containment structure (e.g., a dike or trench), a drainage control system, or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top 60 centimeters of the tank, the freeboard requirement is not applicable.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15
Is hazardous waste fed continuously into the tank?
YES
16
The tank must be equipped with a means to stop the inflow.
NO
17
Inspect the tank in accordance with the applicable EPA standards.
18
Is the tank system being closed?
YES
19
Closure procedures must meet EPA requirements.
NO
20
If all of the steps have been followed, the generator is in compliance with the small quantity generator requirements.
Return to Chapter 2, "Module C: Next Steps," if additional guidance is needed.
Proceed to Chapter 9, "Closure and Post-closure Care Requirements."

Step 15 Continuously fed tanks must meet special EPA requirements.

Step 16 Where HW is continuously fed into a tank, the tank must be equipped with a means to stop this inflow. Typically, tanks may have a waste feed cutoff system or a bypass system to a standby tank. These systems are intended to be used in the event of a leak or overflow from the tank due to a system failure, such as a malfunction in the treatment process or a crack in the tank.

Step 17 The following must be inspected, where present:

- Discharge control equipment (e.g., waste feed cutoff systems, bypass systems, and drainage systems) **at least once each operating day**, to ensure that it is in good working order;
- Data gathered from monitoring equipment (e.g., pressure and temperature gauges) **at least once each operating day** to ensure that the tank is being operated according to its design;
- The level of waste in the tank **at least once each operating day** to ensure compliance with the uncovered tank requirements (Step 14);
- The construction materials of the tank to detect corrosion or leaking fixtures or seams; and
- The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes) **at least weekly** to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

Note: The owner or operator must remedy any deterioration or malfunction that is found according to 40 CFR 264/265.15(c).

Step 18 Generators of between 100 and 1,000 kilograms/month of HW who are accumulating HW in tanks must, upon closure of the facility, remove HW from tanks, discharge control equipment, and discharge confinement structures.

Note: At closure, as throughout the operating period, unless the owner or operator can demonstrate in accordance with 40 CFR 261.3(c) or (d) that any solid waste removed from the tank is not a HW, the owner or operator becomes a generator of HW and must manage it in accordance with all applicable HW generator requirements [40 CFR Parts 262, 263, and 265].

Step 19 See Chapter 10, "Closure and Post-closure Care Requirements," for a description of the procedures to be followed when closing a HW tank system.

Step 20 The generator is in compliance with the small quantity generator requirements of 40 CFR 262.34 and 265.201.

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